

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An electronic microwave circuit ~~(1) with~~ comprising:
at least one semiconductor chip;
field effect transistors (T1—T12) which are integrated upon the at least one
semiconductor chip; ~~(2), characterized by~~
a light source (3), which adapted to radiates the field effect transistors with light; and
having
a housing (6), which, in a microwave excluding manner, encloses the at least one
semiconductor chip (2) and the light source (3) or an optional light wave conductor (8) which is
connected to the light source (3).
2. (Currently Amended) ~~An~~ The electronic microwave circuit ~~in accord with~~ of claim 1,
~~therein characterized in that~~ wherein the field effect transistors (T1—T12) are MESFET,
~~especially GaAsMESFET~~ metal semiconductor field effect transistors.
3. (Currently Amended) ~~An~~ The electronic microwave circuit ~~in accord with~~ of claim 1
~~or 2, therein characterized in that~~ wherein the light source (3) radiates the field effect transistors
(T1—T12) with polychromatic light.
4. (Currently Amended) ~~An~~ The electronic microwave circuit ~~in accord with one of the~~
~~claims of claim 1 to 3, therein characterized in that~~ wherein the light source (3) consists of one or

~~more~~ comprises at least one light emitting diodes (7).

5. (Currently Amended) ~~An~~The electronic microwave circuit ~~in accord with one of the~~
~~claimsof claim 1 to 3, therein characterized in that~~wherein the light source (3) ~~consists~~
~~of~~comprises an illumination of xenon, halogen or of gas discharge means.

6. (Currently Amended) ~~An~~The electronic microwave circuit ~~in accord with one of the~~
~~claimsof claim 1 to 5, therein characterized in that a~~wherein the light wave conductor (8) ~~is~~
~~adapted to~~ diverts at least a portion of the ~~radiation~~light from the light source (3) onto the field
effect transistors (T1—T12).

7. (Currently Amended) ~~An~~The electronic microwave circuit ~~in accord with~~of claim 6,
~~therein characterized, in that~~wherein the light source (3) is placed outside of the housing (6).

8. (Currently Amended) ~~An~~The electronic microwave circuit ~~in accord with~~of claim 4,
~~therein characterized, in that~~wherein the at least one light emitting diode (7) is designed as a
surface mounted device (SMD).

9. (Currently Amended) ~~An~~The electronic microwave circuit ~~in accord with one of the~~
~~claimsof claim 1 to 8, therein characterized, in that~~wherein the housing (6) is impervious to light
and/or is sealed against infiltration of air.

10. (Currently Amended) ~~An~~The electronic microwave circuit ~~in accord with one of the~~
~~claimsof claim 1 to 9, therein characterized, in that~~wherein the microwave circuit (1) forms a
damping circuit.

11. (Currently Amended) ~~An~~The electronic microwave circuit ~~in accord with~~of claim
10, ~~therein characterized, in that~~wherein between an input (E) and an output (A) at least two

damping members (~~D1, D2~~) are connected in series, ~~the~~ and damping whereof the at least two
damping members can be adjusted among several different values by ~~the~~ the toggling connection of
a plurality of resistances (~~R1—R11~~) by the field effect transistors (~~T1—T12~~) to T-circuitry, T-
bypassing circuitry, pi circuits, double pi circuitries, or double T circuits.

12. (Currently Amended) ~~An~~ The electronic microwave circuit ~~in accord with one of the~~
~~claimsof claim 1 to 9, therein characterized, in that~~ wherein the electronic microwave circuit (~~1~~)
forms one or more toggle circuits, ~~especially one or more arrangements of single port, double~~
~~throw circuits.~~

13. (Currently Amended) ~~An~~ The electronic microwave circuit ~~in accord with one of the~~
~~claimsof claim 1 to 12, therein characterized, in that~~ wherein the housing (~~6~~) comprises a lower
housing part ~~6a~~ and an upper housing part ~~6b~~.

14. (Currently Amended) ~~An~~ The electronic microwave circuit ~~in accord with Claimof~~
claim 13, therein characterized, in that wherein the at least one semiconductor chip (~~2~~) is mounted
on a substrate ~~5a~~ installed in the lower housing part ~~5a~~.

15. (Currently Amended) ~~An~~ The electronic microwave circuit ~~in accord with~~ of claim
13 or 14, ~~therein characterized, in that~~ wherein the light source (~~3~~) is mounted on a circuit board
(~~5b~~) in the upper housing part (~~6b~~).

16. (Currently Amended) ~~An~~ The electronic microwave circuit ~~in accord with one of the~~
~~claimsof claim 14, 1 to 12, therein characterized, in that~~ wherein the at least one semiconductor
chip (~~2~~) is mounted upon ~~one of the~~ substrates (~~5a~~) and above the at least one semiconductor
chip (~~2~~) is installed a circuit board (~~5e~~) and the light source (~~3~~) by at least one supporting

element ~~(15)~~ based on the substrate ~~(5a)~~.

17. (Currently Amended) ~~An~~ The electronic microwave circuit ~~in accord with~~ of claim 16, ~~therein characterized, in that~~ wherein the at least one supporting element ~~(15)~~ is an electronic component, ~~especially a series resistance.~~

18. (New) The electronic microwave circuit of claim 1, wherein the field effect transistors are metal semiconductor field effect transistors constructed on a gallium/arsenide substrate.

19. (New) The electronic microwave circuit of claim 1, wherein the electronic microwave circuit forms one or more arrangements of single port, double throw circuits.

20. (New) The electronic microwave circuit of claim 16, wherein the at least one supporting element is a series resistance.